

WHAT IS CLAIMED IS:

1. A variable picture rate decoding apparatus for reproducing a moving picture from an incoming bit stream coded by inter-picture
5 predictive coding including bidirectional prediction, characterized by comprising:

picture rate setting means for getting information about a frame pixel number of the previously-mentioned incoming bit stream, and setting a decoding picture rate of a moving picture from
10 a relation between the previously-mentioned frame pixel number and a decoding processing capability;

decoding means for causing at least a portion of bidirectional inter-picture prediction pictures in the previously-mentioned incoming bit stream to be not decoded, and performing decoding of
15 the previously-mentioned incoming bit stream at the previously-mentioned coding picture rate to get decoded pictures; and

interpolating means for interpolating a picture of the previously-mentioned decoded pictures to get a reproduced picture at a prescribed picture rate.

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2. A variable picture rate decoding apparatus for reproducing a moving picture from an incoming bit stream coded by inter-picture predictive coding including bidirectional prediction, characterized by comprising:

25 decoding controlling means for getting information about a frame pixel number of the previously-mentioned incoming bit

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stream, and setting a decoding method not decoding all
bidirectional inter-picture prediction pictures in the previously-
mentioned incoming bit stream in cases where decoding of
bidirectional inter-picture prediction pictures in the previously-
mentioned incoming bit stream can not be done from a relation
between the previously-mentioned frame pixel number and a
capacity of a frame memory for decoding which will be mentioned
later;

decoding means for decoding the incoming bit stream in
accordance with the previously-mentioned decoding method to get
decoded pictures; and

a frame memory for decoding which uses a memory
corresponding to 4 frames when bidirectional prediction is done as
a memory corresponding to two frames double in pixel number in
cases where bidirectional prediction is not done in accordance with
the previously-mentioned decoding method, and getting a
prescribed reproduced picture from the previously-mentioned
decoded pictures.

3. A variable picture rate decoding method of reproducing a
moving picture from an incoming bit stream coded by inter-picture
predictive coding including bidirectional prediction, characterized
by comprising the steps of:

getting information about a frame pixel number of the
previously-mentioned incoming bit stream, and setting a decoding
picture rate of a moving picture from a relation between the

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previously-mentioned frame pixel number and a decoding processing capability;

causing at least a portion of bidirectional inter-picture prediction pictures in the previously-mentioned incoming bit stream to be not decoded, and performing decoding of the previously-mentioned incoming bit stream at the previously-mentioned set coding picture rate to get decoded pictures; and interpolating a picture of the previously-mentioned gotten decoded pictures to get a reproduced picture at a prescribed picture rate.

4. A variable picture rate decoding method of reproducing a moving picture from an incoming bit stream coded by inter-picture predictive coding including bidirectional prediction, characterized by comprising the steps of:

getting information about a frame pixel number of the previously-mentioned incoming bit stream, and setting a decoding method not decoding all bidirectional inter-picture prediction pictures in the previously-mentioned incoming bit stream in cases where decoding of bidirectional inter-picture prediction pictures in the previously-mentioned incoming bit stream can not be done from a relation between the previously-mentioned frame pixel number and a capacity of a frame memory for decoding which will be mentioned later;

decoding the incoming bit stream in accordance with the previously-mentioned decoding method to get decoded pictures;

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and

- getting a prescribed reproduced picture from the previously-mentioned gotten decoded pictures by a frame memory for decoding which uses a memory corresponding to 4 frames when
- 5 bidirectional prediction is done as a memory corresponding to two frames double in pixel number in cases where bidirectional prediction is not done in accordance with the previously-mentioned decoding method.

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